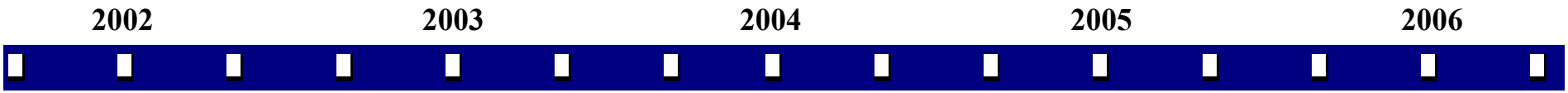
# AW-1: Maintain Runway Use in Reduced Visibility Decision Tree




**LAAS R&D Analysis**

• Research effort to develop LAAS CAT III system performance and design requirements

AND-700

**LAAS Evolution**

• Determine how to proceed with LAAS

**Ground Based Infrastructure**

• Determine how far to reduce

**Criteria for RNP**

• FAA will develop public approach design criteria for RNP

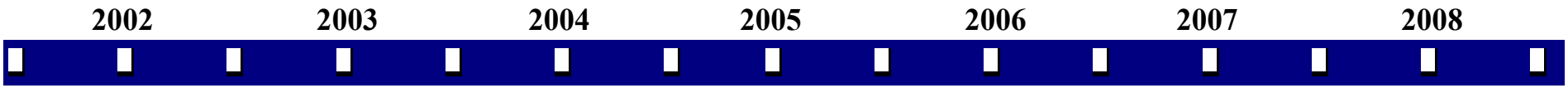
**Roadmap**

• FAA Industry Roadmap

ATP, AFS

**Publish RNP .3 Approach**

# AW-2: Space Closer to Visual Standards Decision Tree




**Are Equipment Performance Requirements Complete?**

- Safety
- Tools/Algorithms
- Interoperability
- Display Symbology
- Installation (e.g., field of view)

SF21 Participants at Key Sites

Research

**Are Pilot and controller Procedure Requirements Complete?**

- Limitations
- Roles and Responsibility
- Mixed Equipage Requirements
- Display and Ergonomics

SF21 Participants at Key Sites

**Determination of How to Proceed**

- ALPA & NATCA
- ACs and FAA Orders
- Training Programs
- ATC Automation Patches

SF21 + AT/AVR at Key SF21 Sites

**Is There Sufficient Aircraft Equipage and Pilot Training?**

- Final software & hardware configuration
- Is there adequate incentive to equip?

Airlines (SF21 airlines equip faster than non SF21)

**Initial Operational Capability at Key SF21 Sites**

- Ops Specs Changes

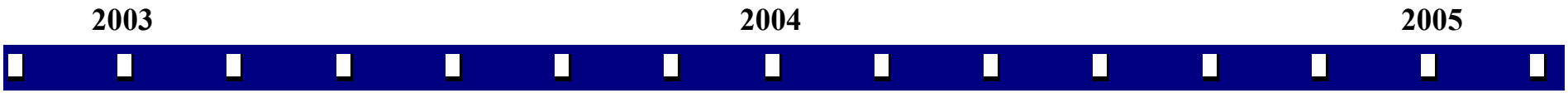
Airline, Key Sites, FSDO

**Controller Training/Adaptation at Other Sites**

- Automation patches as required

AT, Field Facilities

# AW-3: High level Decision Tree for Reconfiguring Airports Efficiently




**Evaluate Reconfiguration Procedures**

- Site by site evaluation, first 6 sites
- Determine if existing airport reconfiguration procedures are sufficient

ATP/Sites

**Procedure Modifications**

- Modifications of reconfiguration procedures (as necessary)

ATP/Sites

**Cost/Schedule Baseline**

- Decision on Revised Cost and Schedule Baseline

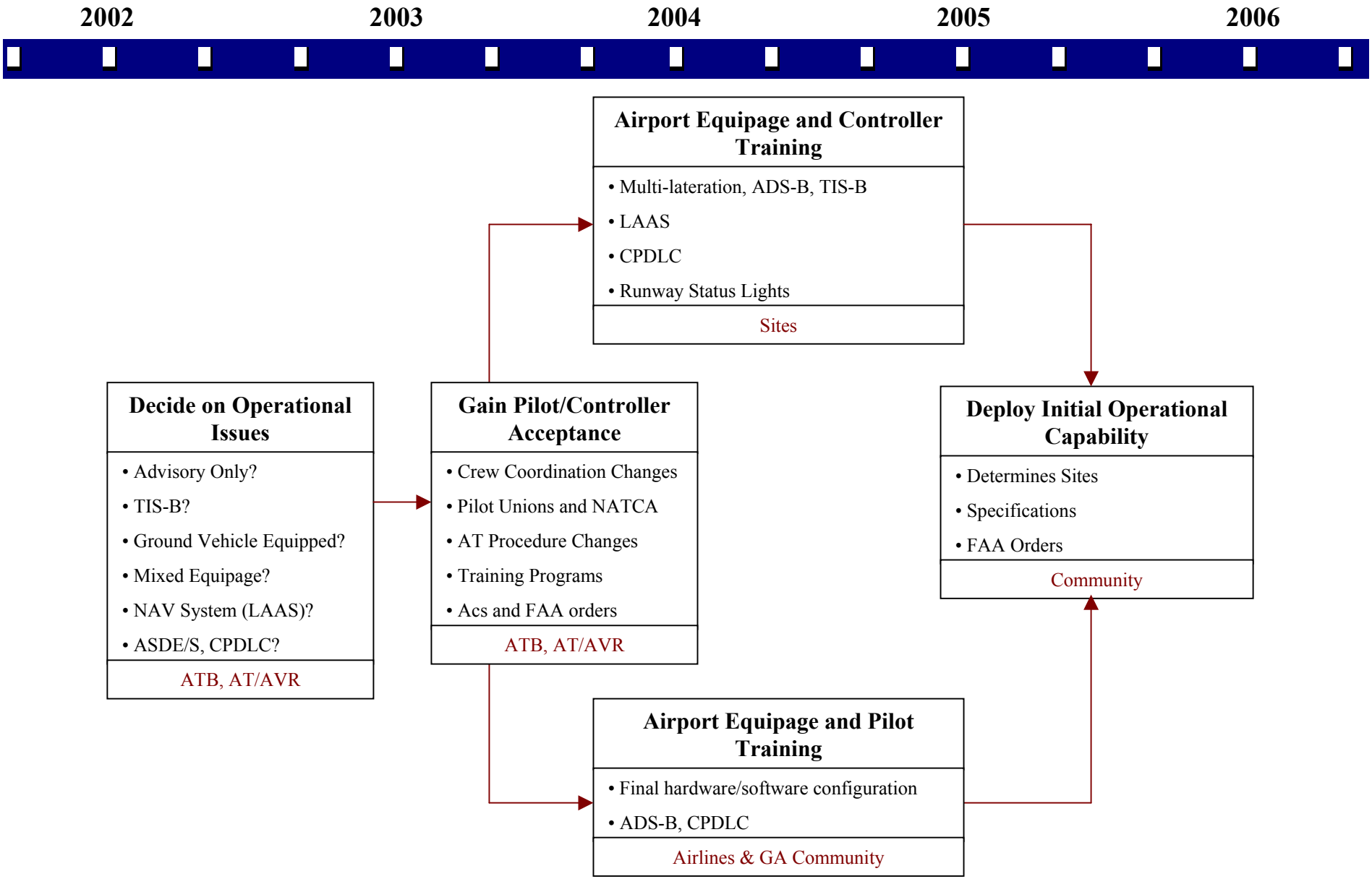
ATB/ATP

**New York Implementation**

- Develop Playbook
- Develop communications of ITWS among TRACON, ARTCCC, ATCSCC, AOCs
- Facilitate common situational awareness and collaboration

ATB/ATP/ARTCC/TRACON/AOC/ATCSCC

# AW-4: Enhanced All Weather Surfaces Operations Decision Tree



# AW-5: Maintain Optimum Runway Use at Airports with Closely Spaced Parallel Runways Decision Tree

**Procedural Development**
- ATC/ATM
- Full vs. partial participation

ATP, AFS

**Research SOIA**

**Pilot Agreement on SOIA (Site Specific)**

**PRM & SOIA**

**Pilot Acceptance of PRM/SOIA**
- ATC/ATM
- National Guidelines

Airlines

**Institute and Develop SOIA Procedures at Initial Sites**
- Pilot Agreement

ATP/AFS

**Collision Risk Assessment**
- 1.5 nmi staggered separation for parallel approaches to runways <2500ft

AFS

**Validation Criteria**
- Data Collection period
- Data to collect

ATB/ATP/AFS/ALPA

**Site Selection**
- Initial validation site
- Other validation sites

ATB/ATP/AFS/ALPA

**Validation Analyses**
- First site: Validated CSPR separation
- Other sites: Validated CSPR separation

ATB/ATP/AFS/ALPA

**Revise CSPR Rule**
- Modified CSPR rule for even thresholds
- Modified rule for uneven thresholds

ATP/ATB/ALPA

**Final Safety Assessment**
- Combined collision risk and wake safety assessment

AFS

**Determine Feasibility of ATS**
- Initial Study
- Identify requirements

ATP/AFS